

L Number	Hits	Search Text	DB	Time stamp
1	90	@ad<19990831 and ("XOR" "exclusive-or" "exclusive or") and (key adj2 (transform\$7 expand\$5 exten\$5)) and constant (380/44).CCLS.	USPAT; US-PGPUB; EPO; JPO; IBM_TDB	2004/02/26 14:02
2	505		USPAT; US-PGPUB; EPO; JPO; IBM_TDB	2004/02/26 14:02
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6	119	@ad<19990831 and ("XOR" "exclusive-or" "exclusive or") and (key adj2 (transform\$7 expand\$5 exten\$5)) and (shift\$3 rotat\$3)	USPAT; US-PGPUB; EPO; JPO; IBM_TDB	2004/02/26 14:03
8	1	(("5442705").PN.) and (shift\$3 rotat\$3)	USPAT; US-PGPUB; EPO; JPO; IBM_TDB	2004/02/26 14:20
9	71	@ad<19990831 and ("XOR" "exclusive-or" "exclusive or") and (key adj2 (transform\$7 expand\$5 exten\$5)) and (shift\$3 rotat\$3) and (substitut\$3 "s-box" "s-boxes")	USPAT; US-PGPUB; EPO; JPO; IBM_TDB	2004/02/26 14:04
10	0	(shift\$3 rotat\$3) near (relatively adj prime)	USPAT; US-PGPUB; EPO; JPO; IBM_TDB	2004/02/26 14:20
11	0	(shift\$3 rotat\$3) and (relatively adj prime)	USPAT; US-PGPUB; EPO; JPO; IBM_TDB	2004/02/26 14:20
12	0	relatively adj prime	USPAT; US-PGPUB; EPO; JPO; IBM_TDB	2004/02/26 14:20
13	316	relative\$3 adj2 prime	USPAT; US-PGPUB; EPO; JPO; IBM_TDB	2004/02/26 14:20
14	222	relative\$3 adj prime	USPAT; US-PGPUB; EPO; JPO; IBM_TDB	2004/02/26 14:21
15	222	relative\$2 adj prime	USPAT; US-PGPUB; EPO; JPO; IBM_TDB	2004/02/26 14:21
16	0	relatively adj prime	USPAT; US-PGPUB; EPO; JPO; IBM_TDB	2004/02/26 14:21
17	0	"relatively prime"	USPAT; US-PGPUB; EPO; JPO; IBM_TDB	2004/02/26 15:04
18	6	"relatively prime"	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/02/26 15:19

21	84	"des" and (key adj expansion)	USPAT; US-PPGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/02/26 15:20
22	45	"des" same (key adj expansion)	USPAT; US-PPGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/02/26 15:20
19	7	"des" near (random adj3 generator)	USPAT; US-PPGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/02/26 15:20
7	1	("5442705").PN.	USPAT; US-PPGPUB; EPO; JPO; IBM_TDB	2004/02/26 15:32
24	4111	(substitut\$3 "s-box" "s-boxes") near ("same" common)	USPAT; US-PPGPUB; EPO; JPO; IBM_TDB	2004/02/26 15:53
28	2947	((substitut\$3 "s-box" "s-boxes") near ("same" common)) and @ad<19990831	USPAT; US-PPGPUB; EPO; JPO; IBM_TDB	2004/02/26 15:50
29	203	((substitut\$3 "s-box" "s-boxes") near ("same" common)) and @ad<19990831) and (sharing shared share)	USPAT; US-PPGPUB; EPO; JPO; IBM_TDB	2004/02/26 15:53
32	9	((substitut\$3 "s-box" "s-boxes") near ("same" common)) and @ad<19990831) and (sharing shared share) and (380/\$.cccls.)	USPAT; US-PPGPUB; EPO; JPO; IBM_TDB	2004/02/26 15:52
33	23	@ad<19990831 and ((substitut\$3 "s-box" "s-boxes") near ( sharing shared share "same" common)) and (random near generat\$3)	USPAT; US-PPGPUB; EPO; JPO; IBM_TDB	2004/02/26 15:55
34	1	(OOMORI and MOTOJI).in.	USPAT; US-PPGPUB; EPO; JPO; IBM_TDB	2004/02/26 15:56
35	52	(OhMORI and MOTOJI).in.	USPAT; US-PPGPUB; EPO; JPO; IBM_TDB	2004/02/26 15:56
36	25	(OhMORI and MOTOJI).in. and (toshiba matsuhsita).as.	USPAT; US-PPGPUB; EPO; JPO; IBM_TDB	2004/02/26 16:00
37	13	(OhMORI and MOTOJI).in. and (toshiba matsuhsita).as.) and @ad<20000831	USPAT; US-PPGPUB; EPO; JPO; IBM_TDB	2004/02/26 16:09
38	1	"EP 874496 A2"	USPAT; US-PPGPUB; EPO; JPO; IBM_TDB	2004/02/26 16:10

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... bit **rotate left** otherwise: two-bit **rotate left** permutation ... ETH Zurich, 1991

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... keys • Stronger & faster than Triple-DES • Active life ... **AES Key Expansion** •

Takes 128-bit (16-byte) key and ... every 4 th has S-box + **rotate** + XOR constant ...

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... stronger & faster than Triple-DES. ... **AES Round. AES Key Expansion**. ... every 4th

has S-box + **rotate** + XOR constant of previous before XOR together. ...

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... Our C implementation of the **key expansion** procedure sets up ... As a basis for comparison,

a typical **DES** implementation is ... odd integer) into R and then **rotate** R by ...

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**An Overview of the Hasty Pudding Cipher Rich Schroeppel & Hilarie ...**

... by the operations that add, shift, and **rotate**, because the ... The cipher key controls the **key expansion** table at the ... a "step" is similar to a **DES** "round") that ...

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... Fall 2003/Lecture 7 21 **Key Expansion** RotWord([byte0, byte1, byte2 ... Speed: faster than DES in software. ... Every time more subkeys are needed, **rotate** left the key 25 ...  
[www.cs.purdue.edu/homes/ninghui/courses/Spring04/lectures/lect07.pdf](http://www.cs.purdue.edu/homes/ninghui/courses/Spring04/lectures/lect07.pdf) - Similar pages

**[PDF] Lecture 6: Two Fish on the Rijndael Menu Breaking Grades File ...**

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... for S-boxes kept secret • Many good choices – **DES**: only one ... of key bytes: b (16, 24, or 32) • **Key Expansion**: – Produces array S ... n means **rotate** left by ...  
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... Twofish, Mars and RC6 are slower than Triple-**DES**. ... 4-bit input/output, logical and **rotate** shifts, and ... Decryption logic Output registers **Key Expansion** logic Su ...  
[csrc.nist.gov/encryption/aes/round2/conf3/papers/15-tchikawa.pdf](http://csrc.nist.gov/encryption/aes/round2/conf3/papers/15-tchikawa.pdf) - Similar pages

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... Stronger & faster than Triple-**DES**. ... CSE565: S. Upadhyaya. Lec 9.15. **AES Key Expansion**. ... every 4th has S-box + **rotate** + XOR constant of previous before XOR together. ...  
[www.cse.buffalo.edu/faculty/shambhu/cse56503/lectures/lec-09-aes.ppt](http://www.cse.buffalo.edu/faculty/shambhu/cse56503/lectures/lec-09-aes.ppt) - Similar pages

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key (XOR OR "exclusive-or") (substitution OR "s-box") expansion (rotate OR rotation)

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Searched the web for key (XOR OR "exclusive-or") (substitution OR "s-box") expansion (rotate OR rotation)

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... transformation and is also performed, in combination with **substitution**, during **key expansion** ... The Add Round **Key** transformation is performed by **XOR**'ing the ...

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... This operation consists of **substitution** boxes which specifies how each ... 192 or 256 bits and a complex **key expansion** process ... The **Xor-ing** of the sub-key before the ...

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... **XOR** constant of previous before **XOR** together • Designed ... step – with a different

**key schedule** • Works ... is unchanged when – swap byte **substitution** & shift ...

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... 2. **Substitution** choice ... **S-box** S and it's inverse S -1 are applied in the law of ... bytes

of 8 in **XOR-Key** dwordS2 - second 4 bytes of 8 in **XOR-Key** dwordP2 - second ...

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... every 4th has **S-box** + **rotate** + **XOR** constant of previous before **XOR** together. ... with

a different **key schedule**. ... swap byte **substitution** & shift rows. ...

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### [From: pgut01@cs.auckland.ac.nz \(Peter Gutmann\) Newsgroups:](#)

sci. ...

... 2. Bitwise **exclusive OR**, denoted by ... random binary words determined by the user's secret

**key K**. Initialising ... ciphertext contents of Beale Cipher No. 1 **XOR**'d with ...

[www.funet.fi/pub/crypt/cryptography/symmetric/ rc2/comments/gutman-960211 - 10k](http://www.funet.fi/pub/crypt/cryptography/symmetric/ rc2/comments/gutman-960211 - 10k) - [Cached](#) - [Similar pages](#)

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File Format: Microsoft Powerpoint 97 - [View as HTML](#)Interest: ... IDEA primitive operations. ® **exclusive OR** + addition mod 216 and x multiplication[See your message here...](#)mod 216+1. ... **XOR**. Octet-Substitution (**S-box**) (see Figure 3-24). ... **Key Expansion**. ...[www.cs.odu.edu/~mukka/cs772s04/slides/chapter3.ppt](http://www.cs.odu.edu/~mukka/cs772s04/slides/chapter3.ppt) - [Similar pages](#)

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... 2. Bitwise **exclusive OR**, denoted by &quot;^&quot; ... binary words determined by the user&#39;s secret **key** K. Initialising the **S-box** RRC.2 ...[www.mirrors.wiretapped.net/security/cryptography/algorithms/rc2/comments/gutman-960211](http://www.mirrors.wiretapped.net/security/cryptography/algorithms/rc2/comments/gutman-960211) - 11k - [Cached](#) - [Similar pages](#)

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... register Long r; /\* Data value R(i-1) \*/ Long k; /\* **Key** K(i) \*/ { Long a, b, c;/\* 32 bit **S-box** output, &amp; ... amp; P output \*/ a = r ^ k; /\* A = R(i-1) **XOR** K(i ...[www.mirrors.wiretapped.net/security/cryptography/algorithms/loki/loki89.c](http://www.mirrors.wiretapped.net/security/cryptography/algorithms/loki/loki89.c) - 13k - [Cached](#) - [Similar pages](#)[ More results from [www.mirrors.wiretapped.net](http://www.mirrors.wiretapped.net) ][ps] [The MARS Encryption Algorithm](#) [Carolynn Burwick](#) c , [Don Coppersmith](#) ...File Format: Adobe PostScript - [View as Text](#)... We denote by cA\*da bitwise **exclusive-or** of the two words c ... We then multiply the second **key** word (constrained to contain ... Then we **xor** R into L, and also view the ...[www.research.ibm.com/security/mars-short.ps](http://www.research.ibm.com/security/mars-short.ps) - [Similar pages](#)Result Page: [1](#) [2](#) [3](#) [4](#) [5](#) [6](#) [7](#) [8](#) [9](#) [10](#) [Next](#)  Dissatisfied with your search results? [Help us improve.](#)[Google Home](#) - [Advertise with Us](#) - [Business Solutions](#) - [Services & Tools](#) - [Jobs, Press, & Help](#)

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